



Diarrhea in Children Under Five Years of Age in 3 Pediatrics Hospitals in Baghdad

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Abstract: Background; Diarrhea disease is one of the principle causes of morbidity and mortality among children in developing countries.

The Objective of This Study; were to determine the prevalence of diarrhea and The factors associated with it in children less than 5years old in Baghdad .Iraq.

Methodology; Across sectional study was conducted in two pediatric and women hospitals and one of general hospital in Baghdad which are including the pediatric department in each hospital during the period eight months started from May 2021 to the end of December 2021 the study involves children less than 5years of age.

Results; We found the higher percentage 50.5% of cases were in the age group less than one year ; followed by 27.3% among the age groups 4 to 5 years and 22.2% in the age 1 to 4 years the higher percentage 75.2% of cases had to take treatment during staying in the hospital and 24.8% were not having it .

Conclusion; we concluded the male cases were more than female cases .few of cases was used the (ORS) .

Recommendation; we recommended to advice the women to use the Oral rehydration salts(ORS) and should by supplied to all children with diarrhea; also should be continue to eat Nutritious foods without restriction during a diarrheal illness.

Introduction

Diarrhea, also spelled diarrhea, is the condition of having at least three loose, liquid, or watery bowel movements each day. It often lasts for a few days and can result in dehydration due to fluid loss. Signs of dehydration often begin with loss of the normal stretchiness of the skin and irritable behavior. This can progress to decreased urination, loss of skin color, (Rupnik M, Wilcox MH, Gerding DN (July 2009).)a Loose but non-watery stools in babies who are exclusively breastfed, however, are normal. The most common cause is an infection of the intestines due to either a virus, bacterium, or parasite—a condition also known as gastroenteritis. These infections are often acquired from food or water that

has been contaminated by feces, or directly from another person who is infected. The three types of diarrhea are: short duration watery diarrhea, short duration bloody diarrhea, and persistent diarrhea (lasting more than two weeks, which can be either watery or bloody). The short duration watery diarrhea may be due to cholera, although this is rare in the developed world. If blood is present, it is also known as dysentery. A number of non-infectious causes can result in diarrhea. These include lactose intolerance, irritable bowel syndrome, non-celiac gluten sensitivity, celiac disease, inflammatory bowel disease such as ulcerative colitis, hyperthyroidism, bile acid diarrhea, and a number of medications (Abdelmalak B, Doyle J, eds. (2013). In most cases, stool cultures to confirm the exact cause are not required. Diarrhea can be prevented by improved sanitation, clean drinking water, and hand washing with soap breastfeeding for at least six months and vaccination against rotavirus is also recommended. Oral rehydration solution (ORS)—clean water with modest amounts of salts and sugar—is the treatment of choice. Zinc tablets are also recommended.(DuPont HL (April 2014).

These treatments have been estimated to have saved 50 million children in the past 25 years. When people have diarrhea it is recommended that they continue to eat healthy food and babies continue to be breastfed. If commercial ORS is not available, homemade solutions may be used. In those with severe dehydration, intravenous fluids may be required. Most cases, however, can be managed well with fluids by mouth. Antibiotics, while rarely used, may be recommended in a few cases such as those who have bloody diarrhea and a high fever, those with severe diarrhea following travelling, and those who grow specific bacteria or parasites in their stool. Loperamide may help decrease the number of bowel movements but is not recommended in those with severe disease.

About 1.7 to 5 billion cases of diarrhea occur per year. It is most common in developing countries, where young children get diarrhea on average three times a year. Total deaths from diarrhea are estimated at 1.26 million in 2013—down from 2.58 million in 1990.] In 2012, it was the second most common cause of deaths in children younger than five (0.76 million or 11%). Frequent episodes of diarrhea are also a common cause of malnutrition and the most common cause in those younger than five years of age. Other long term problems that can result include stunted growth and poor intellectual development. (Crockett ME, Keystone JS (2012)

The Objective of this Study; were to determine the prevalence of diarrhea and The factors associated with it in children less than 5years old in Baghdad .Iraq .

Methodology

Study design; A descriptive cross sectional study was conducted among children Under five years to identify the diarrhea occurred among those who attend the [Ibn- Albaldi, Fatima Al- Zahra, Al-Shaheid Alsadir] hospitals in Baghdad.

Time of data collection; the study is employed through the present study from first Of May 2021 to the end of December 2021.

Ethical Clearance; formal administrative approval is obtained to contact the study From the hospitals which accepted the study.

Sampling Collection; A purposive sample of (8422) diarrhea cases was selected From three hospitals in Baghdad.

Inclusion Criteria; we included the children less than 5years who had diarrhea and Admitted to the hospital for diagnosis and treatment.

Exclusion Criteria; we excluded the children with other medical disease and the Children with the age above 5years also were excluded.

Data Collection; the description of the demographic characteristics of study groups that includes the following variables (age of child, gender, types of treatment, type of hospitals). Data were obtained from the medical record through the utilization of the study instrument [table 1]. tables and graphical was used to analyze and assess the results of the study under the application of the statistical package (SPSS) ver (20.0).

Results

Table 1: Distribution of studied samples by hospitals.

Hospitals	Number of diarrhea cases	Antibiotics treatment	ORS
Ibn –Albaldi	2971	1311	1660
Fatima Al-Zahra	4424	3997	427
Al-Shaheid AlSadir	1027	1027	0
Total	8422	6335	2087

Table 4-2: Distribution of diarrhea cases among children under 5 years according to age groups.

Age groups	Frequency	Percent
Less than one years	4250	50.5
1 to 4 years	1871	22.2
4 to 5 years	2301	27.3
Total	8422	100

Table 4-3: Distribution of diarrhea cases among children under 5 years according to gender.

Gender	Frequency	Percent
Male	4487	53.7
Female	3935	46.7
Total	8422	100

Table 4-4: Distribution of diarrhea cases among children under 5 years according to treatment.

Treatment	Frequency	Percent
Yes	6335	75.2
No	2087	24.8
Total	8422	100

Table 4-5: Distribution of diarrhea cases among children under 5 years according to hospitals

Hospitals	Frequency	Percent
Ibn-Albaldi hospital	2971	35.3
Fatima Al-Zahra hospital	4424	52.5
Al- Shaheid AlSadir hospital	1027	12.2
Total	8422	100

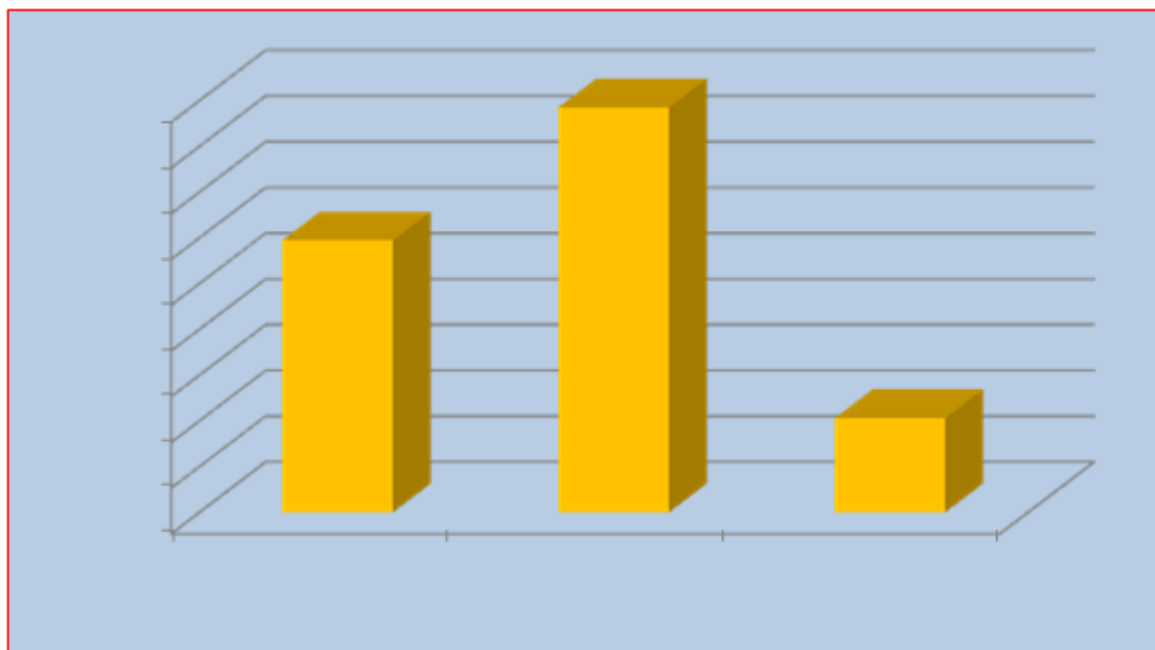


Figure 4-6: Number of diarrhea samples among children under 5 years according to hospitals

Discussion

The study was conducted in three hospitals in three popular areas in Baghdad –Iraq Namely Al-Talibiya and Al- Habibya and Al-Daakhl.

The study indicated that most cases of diarrhea were in the age group less than one years.

The study indicated that male cases diarrhea were more than female.

The study indicated that antibiotics were used more in cases of diarrhea for children Under 5years of age.

The study indicated that few of cases diarrhea was used (ORS).

The study indicated that most cases diarrhea were collected from Fatima Al-Zahra Hospital.

Conclusion

Most cases diarrhea were in the age group under one years. Male cases diarrhea were more than female cases diarrhea. Majority of cases diarrhea were take treatment.

Few of cases diarrhea was used the ORS.

Most cases diarrhea were collected from Fatima Al- Zahra hospital.

Recommendation

Recommendation: We recommended to

- Oral rehydration salts (ORS) should be supplied to all children with diarrhea.
- Parents require education on its use.
- Children should continue to eat nutritious foods without restriction during a diarrheal illness.
- All children under the age of 5 years with diarrhea should receive zinc supplementation for 14 days.

Antidiarrheal medications such as loperamide and diphenoxylate plus atropine are not appropriate for use in children in the Medical Stability Operations (MSO) setting. The decision to start antibiotics should be based on the child's symptoms and syndromic classification.

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